

FORWARD ERROR CORRECTION ON MULTIPLEXED CDMA CHANNELS
ENABLING HIGH PERFORMANCE CODING

ABSTRACT OF THE DISCLOSURE

5 A protocol for optimizing the use of coded
transmissions such as over wireless links. In this
technique, interframes are first split into segments
selected to be an optimum size according to transmission
characteristics of the radio channel. Segments are
assigned a position identifier and redundancy check sum.
10 Segments are then assembled into blocks and a forward error
correction algorithm is applied to the block to generate
redundancy bits. The FEC block is then split up among
available communication channels and forwarded to the
receiver. The inverse process is applied at the receiver.
15 Using this scheme, only segments containing erroneous data
need to be resent. A large block size required for high
performance forward error correction may therefore be used
while at the same time minimizing latencies associated with
the need to resend entire blocks when errors cannot be
20 recovered.